

Demonstrable and replicable cluster implementing systemic solutions through multilevel circular value chains for eco-efficient valorization of fishing and fish industries side- streams - Horizon 2020 Innovation Action

Making the fish processing side-streams sustainable and efficient



THE PROJECT GOAL IN A NUTSHELL

To streamline the fishing industry operational flows. Including its industrial side-streams. Establishing a climate-neutral regional reproducible cluster based on the bio/blue/green/circular economy approaches. With a proper focus on valorization of the related waste. For pre-treatment and extraction of bio-active components. And for recycling end of life fishing gear from aquaculture and fisheries. To supply the food, automotive, cosmetic, and packaging industries. Providing fertilizers and biodiesel for agricultural applications as well.

The project specific objectives

Design, development, and deployment of **innovative bio-mass pre-treatment and specific extraction technologies** to enable: sustainable and efficient utilization of **Fish Processing Side-streams (FPS)** by obtaining bio-actives and gelatin for high value-added food supplements and skin care products, biodegradable, and compostable barrier layer for food packaging; other Fishing and **Fish-industry Side-streams (FFS)** will be targeted in order to transform their outcomes into fertilizers, biodiesel, components for cosmetic applications, polymer-based automotive constituents, and packaging for cosmetic products.

Plastics & Bioplastics circular system development and implementation:

development and validation of bioplastic films from Fishing industry Side Streams; local upscaling of bioplastic production;

production of plastic barrier biofilm for food packaging

retrievement of Poly-Lactic Acid (PLA) beads from agri-side-streams for Eco-FISH-boxes injection molding;

EPLA Eco-FISH-boxes production, distribution and recycling;

cleaning and recycling of (Polyamide 6) PA6 derived from fishing and aquaculture nylon nets;

production demo of recycled PLA automotive components products and prove replicability of the recycling process; compliance assessment of final products obtained by PA6 recycling.



Facts & figures



The project is coordinated by **FILSE spa**, the financial body for economic development of the Ligurian regional administration (Italy).

The EcoeFISHent consortium gathers **34** partners from **7** countries.

> 18 Mio EUR budget

> 15 Mio EUR financing

10 different final products

10 involved domains (at least)

6 new Circular Value Chains

5 years duration

Scan the code for details!



SCAN ME

Funding instrument and scheme

Horizon 2020 - Innovation Action

Grant agreement ID:

101036428

Call for proposals:

H2020-LC-GD-2020 (Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal)

Topic:

LC-GD-3-2-2020 - Demonstration of systemic solutions for the territorial deployment of the circular economy

Start date

1 October 2021

End date

30 September 2026 Total cost: € 18 583 714,47

EU contribution. € 15 145 267,12

As the horizon 2020 program defined several priority challenges where targeted investment in research and innovation can have a real impact benefitting the citizen, the project was funded under the "Climate action, Environment, Resource Efficiency and Raw Materials" one.



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